DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-026715
Date Inspected: 11-Nov-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name: Fred Von Hoff

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Sections

Summary of Items Observed:

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Orthotropic Bridge Girder (OBG) Sections:

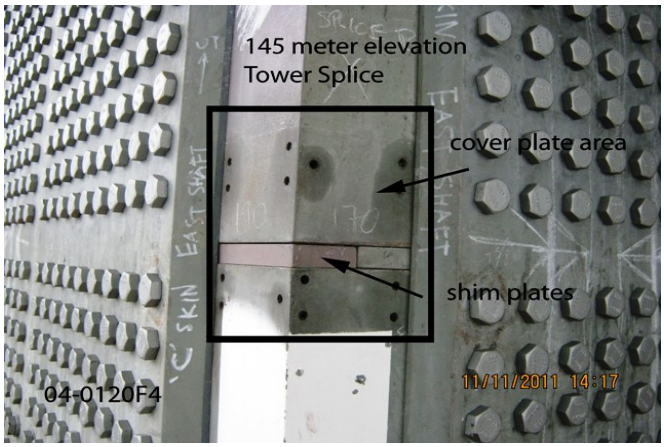
14E-PP128 E3-– LLH #1 and #2 – According to the QC documents being used by QC Inspection personnel this weld joint appears to be designated as being a Seismographic Performance Critical member (SPCM). This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) using the Shielded Metal Arc Welding (SMAW) process inside the OBG section at this location in the overhead (4G) position. This QA Inspector randomly observed a hand held gas torch was used to preheat the base metal from outside the OBG section form the top deck. This QA Inspector was informed by QC Inspector Fred Von Hoff the preheat temperature exceeded the minimum (150°F). This QA Inspector observed QC Inspector Fred Von Hoff verified the following welding parameters; 130 amperes. This QA Inspector observed a 3.2 mm diameter E7018H4R electrode was being used and had been taken from a seal storage container. The welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1050-CU. Later this shift this QA Inspector observed the weather condition had turned to light rain. This QA Inspector observed a covering (portable shed) had been positioned over the welding area on the top side of the OBG deck and an effort to divert the rain water. See photo below. The rain appeared to strengthen and efforts taken to keeps the area dry appeared to fail. This QA Inspector was informed by ABF welding Foreman Eric Sparks (#3040) that welding was being canceled for the rest of the day

due to rain. The welding observed by this QA Inspector was performed prior to the heavy rain storm and appeared to comply with the contract requirements.

OBG Tower – This QA Inspector was informed by Lead QA Inspector Danny Reyes that ABF personnel could be working on the cover plates at various locations on the Tower splices and instructed this QA Inspector to look into the work being performed. This QA Inspector spoke with ABF Foreman Kevin Karber and was informed the cover plates for all the Tower splices had been prefabricated (in China at ZPMC) and fit except at the 145 meter elevation where various thicknesses of shim plates were positioned under each tower section. This QA Inspector was informed the cover plates at all other elevations had been installed but that at the 145 meter elevations each one would be fabricated onsite and that each one would be different. This QA Inspector observed that only one had been fabricated and welded at approximately 1330 hours this date. See photos below; typical tower shaft shims at cover plate area, typical prefabricated cover plate and the one fabricated on site. This QA Inspector observed the one cover plate was located as follows; 145 meter elevation, North Shaft, and at the B-skin to C-skin corner. This QA Inspector informed Lead QC Inspector Bonifacio Daquinag Jr. of the conversation above, the observations regarding the cover plates and welding and the need to have a QC Inspector verify the welding personnel was certified, using the applicable Welding Procedure Specification (WPS) and verification the work was being performed in accordance with the contract requirements. Lead QC Inspector Bonifacio Daquinag Jr. stated he would send a QC Inspector up to the 145 meter elevation where the work was being performed. This QA Inspector was contacted via phone by Caltrans Construction Engineer Saman Soheili requesting an update on the work regarding the Tower cover plates. This QA Inspector informed Saman Soheili of the observations and conversations noted above. This QA Inspector informed Lead QA Inspector Danny Reyes of the conversations and observations noted above.

This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.

Summary of Conversations:
This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable conversations.



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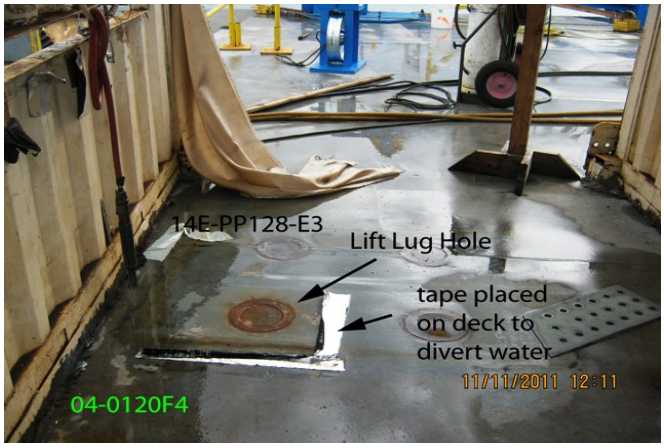

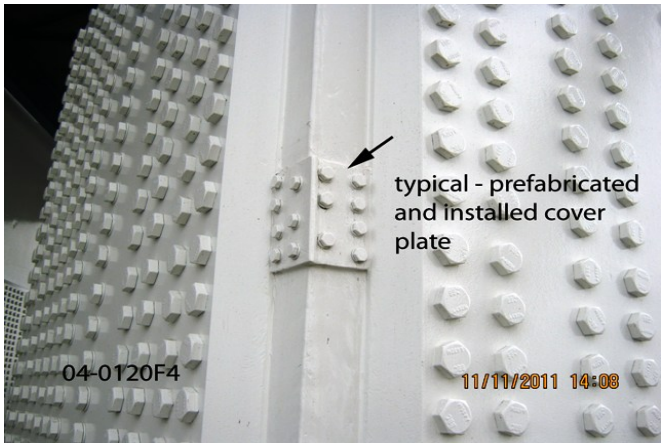

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer